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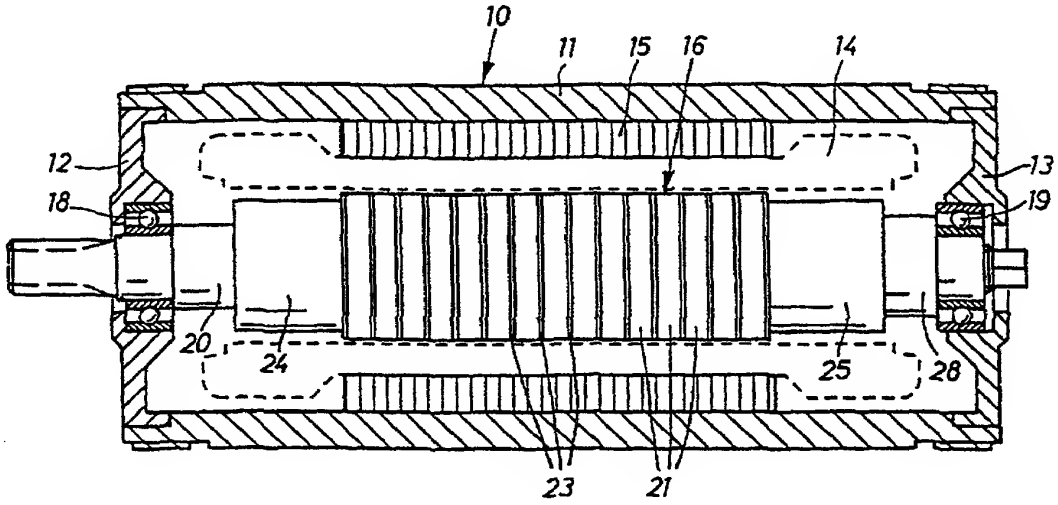

(57) Abstract

A rotor for a high speed permanent magnet motor comprises a central spindle (20), a plurality of magnet discs (21) stacked on the spindle (20) and axially clamped by a clamping device (24–26, 28) on the spindle (20) to form an axially pre–tensioned disc packet core (16), each magnet disc (21) has at least one electrically insulating layer, wherein between the magnet discs (21) and/or between one magnet disc (21) and the clamping device (24–26, 28) there are located a reinforcement discs (23) of a high–strength material, and the reinforcement discs (23) are clamped between the magnetic discs (21) or between one magnet disc (21) and the clamping device (24–26, 28) such that a clamping force generated frictional engagement is obtained between the reinforcement discs (23) and the magnet discs (21) by which centrifugal forces are transferred from the magnet discs (21) to the reinforcement discs (23) during motor operation, thereby relieving the magnet discs (21) of tensile stress.